## Message

Linder, Steven [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP From:

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A50837ECD4B24423ABDFA574F6538A58-SLINDER]

Sent: 9/16/2015 4:23:21 PM

To: Takaba, Richard R [richard.takaba@doh.hawaii.gov]; steven.chang@doh.hawaii.gov;

> roxanne.kwan@doh.hawaii.gov; stuart.yamada@doh.hawaii.gov; Thu Perry [thu.perry@doh.hawaii.gov] Huetteman, Tom [Huetteman.Tom@epa.gov]; Shalev, Omer [Shalev.Omer@epa.gov]; Doug Schwarm

CC:

[dschwarm@atlasgeotechnical.com]; Philip Myers [phil@pemyconsulting.com]; Pallarino, Bob

[Pallarino.Bob@epa.gov]; Sugerman, Rebecca [Sugerman.Rebecca@epa.gov]

Subject: Do Not Release - Red Hill Catastrophic Release Memo (Final Draft)

Attachments: Red Hill Catastrophic Release Final 20150915.pdf

This is a initial analysis of the potenital for a catastropic release at Red Hill. We are currently considering including this in our admin record as part of our response to comments. Please let me know if you have any questions.

Steven Linder, P.E. Underground Storage tanks Program Manager US EPA Region 9

415-972-3369

From: Doug Schwarm <dschwarm@atlasgeotechnical.com>

Sent: Tuesday, September 15, 2015 4:22 PM

To: Linder, Steven

Cc: Shalev, Omer; Pallarino, Bob; Phil Myers; Huetteman, Tom; Callado, Jinky

Subject: Re: Red Hill Catastrophic Release Memo (Final)

Per your request, Steven, here's the preferred version with "final" in the file name.

Doug

Doug Schwarm, P.E. Chief Engineer 808-282-8314

On September 15, 2015 at 4:18:37 PM, Linder, Steven (linder.steven@epa.gov) wrote:

Let's go with the Cities version. Can you resend the cities version and I will send on to DOH for their input.

## **Thanks**

Steven Linder, P.E. Underground Storage tanks Program Manager US EPA Region 9

415-972-3369

From: Doug Schwarm <dschwarm@atlasgeotechnical.com>

Sent: Tuesday, September 15, 2015 3:45 PM

To: Linder, Steven

Cc: Huetteman, Tom; Pallarino, Bob; Phil Myers; Callado, Jinky; Shalev, Omer

Subject: Re: Red Hill Catastrophic Release Memo (revised)

Hi Steve - Here are two more versions of the memo with two choices for Figure 2. I fear that I may have created a monster here, not really understanding how hard it would be to find a recognizable landmark with the same seismic hazard as Red Hill. A lot more shaking, a lot less shaking, those we have in abundance. The same, though, is tricky.

So, let me know which version you prefer, landmark names with the Sunsphere explained a little or Cities, and maybe delete all of the other files since you have 4 versions of the document at this point.

Cheers, Doug

Doug Schwarm, P.E. Chief Engineer 808-282-8314

On September 15, 2015 at 10:40:20 AM, Linder, Steven (linder.steven@epa.gov) wrote:

One quick thought. On the seismic hazard comparison, every location is decribed as a landmark vs. location except for Knoxville. Would it be fair to identify the Sunsphere in Knoxville, TN vs. just Knoxville on the chart and in the dicussion?

Steven Linder, P.E. Underground Storage tanks Program Manager US EPA Region 9

415-972-3369

From: Doug Schwarm < dschwarm@atlasgeotechnical.com>

Sent: Tuesday, September 15, 2015 8:19 AM

To: Linder, Steven

Cc: Phil Myers; Pallarino, Bob; Callado, Jinky; Shalev, Omer; Huetteman, Tom

Subject: Red Hill Catastrophic Release Memo (revised)

Good morning, Steve - Here's a revised version with the typos corrected.

Have a great day, Doug

Doug Schwarm, P.E. Chief Engineer